

## Los Alamos/Tribogenics create highly portable imaging system

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LOS ALAMOS, N.M., and MARINA DEL REY, Calif., June 26, 2013—Los Alamos National Laboratory and Tribogenics, the pioneer of innovative X-ray solutions, have partnered to create a unique, lightweight, compact, low-cost X-ray system that uses the MiniMAX (Miniature, Mobile, Agile, X-ray) camera to provide real-time inspection of sealed containers and facilities. The innovative technology will be featured at the International Atomic Energy Agency (IAEA) International Conference on Nuclear Security: Enhancing Global Efforts, July 1-5, in Vienna, Austria.

"Cost and portability are the major barriers to expanding the use of X-ray imaging," said Scott Watson of Los Alamos's Nuclear Engineering and Nonproliferation Division. "We designed MiniMAX to demonstrate that such a system will open up new applications in security inspection, field medicine, specimen radiography and industrial inspection."

Los Alamos has developed MiniMAX as an alternative to the large, expensive and fixed facilities presently required for security inspections using X-ray imaging. The complete MiniMAX portable radiography system weighs less than five pounds, compared to much larger and heavier systems currently available.

Los Alamos Physicists demonstrated MiniMAX using a conventional X-ray source, a radioisotopic source, and a prototype source from Tribogenics operating at 90 keV. The Los Alamos team used the Tribogenics source to produce an X-ray image of a handheld calculator.

"We were delighted when Los Alamos approached us to explore a partnership," said Carlos Camara, Chief Scientist at Tribogenics. "This is exactly the type of breakthrough, portable application we envision for our disruptive X-ray technology."

## About **Tribogenics**

Tribogenics is a transformative X-ray technology company developing affordable and highly portable solutions for materials analysis and imaging. The Tribogenics range of X-ray sources includes the X-Change™ cartridge, the world's smallest turnkey X-ray source designed for use in revolutionary new XRF systems. Tribogenics technology is based on a DARPA-funded initiative that originated at UCLA and the company is venture-backed by prominent investors, including Peter Thiel's Founders Fund.

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